

WHAT IS CLAIMED IS:

1                   1. A suspension having a magnetic head assembly mounted thereon, said  
2 magnetic head assembly comprising:  
3                   a write head for writing information to a recording medium;  
4                   a read head for reading said information from said recording medium; and  
5                   a resistive heating element for controlling flying heights of said write head and  
6 said read head;  
7                   wherein in wiring from each terminal of said write head, said read head, and said  
8 resistive heating element to said suspension, wires of said resistive heating element are disposed  
9 such that they sandwich wires of said read head.

1                   2. The suspension of claim 1 wherein a waveform of a current or a voltage to said  
2 resistive heating element has a time constant of 1  $\mu$ sec or more.

1                   3. A suspension having a magnetic head assembly mounted thereon, said  
2 magnetic head assembly comprising:  
3                   a write head for writing information to a recording medium;  
4                   a read head for reading said information from said recording medium; and  
5                   a resistive heating element for controlling flying heights of said write head and  
6 said read head;  
7                   wherein in wiring from each terminal of said write head, said read head, and said  
8 resistive heating element to said suspension, wires of said resistive heating element are disposed  
9 between wires of said write head and wires of said read head.

1                   4. The suspension of claim 3 wherein a waveform of a current or a voltage to said  
2 resistive heating element has a time constant of 1  $\mu$ sec or more.

1                   5. A suspension having a magnetic head assembly mounted thereon, said  
2 magnetic head assembly comprising:  
3                   a write head for writing information to a recording medium;  
4                   a read head for reading said information from said recording medium;

5                   a resistive heating element for controlling flying heights of said write head and  
6 said read head; and  
7                   a programmable voltage or current source for supplying power to said resistive  
8 heating element to allow for variations in the power supplied to said resistive heating element to  
9 account for variations in the flying height due to variations in the manufacturing process of said  
10 write head and said read head.

1                   6. The suspension of claim 5 wherein a waveform of a current or a voltage to said  
2 resistive heating element has a time constant of 1  $\mu$ sec or more.

1                   7. A suspension having a magnetic head assembly mounted thereon, said  
2 magnetic head assembly comprising:  
3                   a write head for writing information to a recording medium;  
4                   a read head for reading said information from said recording medium;  
5                   a resistive heating element for controlling flying heights of said write head and  
6 said read head; and  
7                   a voltage or current source for supplying power to said resistive heating element;  
8                   wherein in wiring from each terminal of said write head, said read head, and said  
9 resistive heating element to said suspension, wires of said resistive heating element are disposed  
10 to provide shielding of said read head.

1                   8. The suspension of claim 7 wherein said voltage or current source is configured  
2 not to switch during a data or servo signal read operation.

1                   9. A suspension having a magnetic head assembly mounted thereon, said  
2 magnetic head assembly comprising:  
3                   a write head for writing information to a recording medium;  
4                   a read head for reading said information from said recording medium;  
5                   a resistive heating element for controlling flying heights of said write head and  
6 said read head; and  
7                   a current or voltage source for supplying power to said resistive heating element,  
8 said current or voltage source providing a waveform having a time constant of 1  $\mu$ sec or more.

1                    10. The suspension of claim 9 wherein in wiring from each terminal of said write  
2 head, said read head, and said resistive heating element to said suspension, wires of said resistive  
3 heating element are disposed to provide shielding of said read head.